

Applicant: Joachim Laempe
Application No.: Not Yet Known

IN THE CLAIMS

1. (Currently amended) Method for producing casting cores and/or casting molds with a core shooter and/or mold shooter (1) with at least one shooting unit (2), which has a shooting head (4) and in which a material to be shaped (50), especially comprising filling a mold with a mixture made from core or molding sand with a binder, is filled, and by supplying compressed air through a shooting board (5) having at least one shooting opening (6) is shot for shooting the material into [[a]] the mold (100), characterized in that and mechanically loosening the material to be shaped (50) present in the shooting unit (2) is loosened mechanically before, during, and/or after the shooting.
2. (Currently amended) Method according to Claim 1, characterized in that further comprising mixing the material to be shaped (50) is mixed during loosening.
3. (Currently amended) Device for producing casting cores and/or casting molds [[with]] comprising at least one shooting unit (2) having a shooting head (4) to be filled with material to be shaped (50), especially core or molding sand with a binder, [[with]] a shooting cylinder (3) used for supplying compressed air during shooting, and with a shooting board (5) having at least one shooting opening (6), especially for performing the method according to Claim 1 or 2, characterized in that and at least one moveable mixing tool (7) is arranged at least in the shooting head (4).
4. (Currently amended) Device according to Claim 3, characterized in that the mixing tool (7) can be driven in the shooting head (4), especially so that it rotates, preferably about a longitudinal center axis of the shooting head (4).

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5. (Currently amended) Device according to ~~Claim 3 or 4, characterized in that Claim 4, wherein~~ the mixing tool (7) has a drive (8) that drives [[the]] ~~a~~ rotating shaft (9), which is oriented along the longitudinal center axis of the shooting unit (2) and on which at least one projecting mixing vane (10) is arranged.
6. (Currently amended) Device according to ~~one of Claims 3 to 5, characterized in that Claim 5, wherein~~ the drive (8) can be controlled before, during, and/or after the shooting process.
7. (Currently amended) Device according to ~~one of Claims 3 to 6, characterized in that Claim 3, wherein~~ the mixing tool (7) is arranged close to the shooting board (5), especially in a center region of the shooting head (4).
8. (Currently amended) Device according to ~~one of Claims 3 to 7, characterized in that Claim 5, wherein~~ the drive (8) is arranged at an upper end of the shaft (9) and preferably in an upper part of the shooting unit (2).
9. (Currently amended) Device according to ~~one of Claims 3 to 8, characterized in that Claim 5, wherein~~ a plurality, preferably three, of mixing vanes (10) are arranged on the shaft (9).
10. (Currently amended) Device according to ~~one of Claims 3 to 9, characterized in that Claim 9, wherein~~ the mixing vanes (10) are oriented horizontally.
11. (Currently amended) Device according to ~~one of Claims 3 to 10, characterized in that Claim 9, wherein~~ a length of the mixing vanes (10) in the shooting cylinder (3)

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corresponds approximately to a radius of the shooting cylinder (3) and [[that]] a lower one of the mixing vanes (10) in the shooting head (4) is longer than the mixing vane (10) in the shooting cylinder (3) and reaches at least to the shooting openings (6) and/or projects past the shooting openings (6).

12. (Currently amended) Device according to ~~one of Claims 3 to 11, characterized in that Claim 9, wherein~~ the shaft (9) reaches with a lower free end thereof nearly up to the shooting board (5) and [[that]] the mixing vane (10) close to the shooting board (5) is arranged on or near a lower free end of the shaft (9).

13. (Currently amended) Device according to ~~one of Claims 3 to 12, characterized in that Claim 9, wherein~~ the mixing vane (10) is assembled from several individual vanes, ~~preferably from two individual vanes forming a mixing vane pair~~ and [[that]] the individual vanes are mounted with inner ends thereof to the shaft (9) of the mixing tool (7) and point with outer free ends thereof radially in different directions.

14. (Currently amended) Device according to ~~one of Claims 3 to 13, characterized in that Claim 5, wherein~~ the mixing tool (7) is fixed detachably to the drive (8) and can be removed therefrom.

15. (Currently amended) Device according to ~~one of Claims 3 to 14, characterized in that Claim 3, wherein~~ a discharge opening (11) for removing excess material to be shaped (50) is provided in the shooting head (4).

16. (New) Device according to Claim 13, wherein the mixing vane (10) is assembled from two separate vanes arranged as a mixing vane pair.